

WHAT IS CLAIMED IS:

1. A drug eluting medical device comprising:
an implantable intraluminal structure;
5 a pharmaceutically active agent, in therapeutic dosages, affixed to at least a portion of the implantable intraluminal structure; and
a stabilizing agent mixed with the pharmaceutically active agent to substantially hinder degradation thereof through oxidation.
- 10 2. The drug eluting medical device according to claim 1, wherein the implantable intraluminal structure comprises a stent.
3. The drug eluting medical device according to claim 1, wherein the pharmaceutically active agent comprises a rapamycin.
- 15 4. The drug eluting medical device according to claim 1, wherein the pharmaceutically active agent comprises sirolimus.
5. The drug eluting medical device according to claim 1, wherein the
20 stabilizing agent comprises an antioxidant.
6. The drug eluting medical device according to claim 5, wherein the antioxidant comprises Butylated Hydroxytoluene.
- 25 7. The drug eluting medical device according to claim 5, wherein the antioxidant comprises Tocopherols.
8. The drug eluting medical device according to claim 5, wherein the antioxidant comprises Ascorbic Acid.
- 30 9. The drug eluting medical device according to claim 5, wherein the antioxidant comprises Ascorbyl Palmitate.

10. A drug eluting medical device comprising:
an implantable intraluminal structure;
a polymeric solution;
a pharmaceutically active agent, in therapeutic dosages,
5 incorporated into the polymeric solution, the resulting mixture being
affixed to at least a portion of the implantable intraluminal structure; and
a stabilizing agent incorporated into the resulting mixture to substantially
hinder degradation of the pharmaceutically active agent through
oxidation.
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11. The drug eluting medical device according to claim 10, wherein the
implantable intraluminal structure comprises a stent.
12. The drug eluting medical device according to claim 10, wherein the
15 pharmaceutically active agent comprises a rapamycin.
13. The drug eluting medical device according to claim 10, wherein the
pharmaceutically active agent comprises sirolimus.
- 20 14. The drug eluting medical device according to claim 10, wherein the
stabilizing agent comprises an antioxidant.
15. The drug eluting medical device according to claim 14, wherein the
antioxidant comprises Butylated Hydroxytoluene.
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16. The drug eluting medical device according to claim 14, wherein the
antioxidant comprises Tocopherols.
17. The drug eluting medical device according to claim 14, wherein the
30 antioxidant comprises Ascorbic Acid.
18. The drug eluting medical device according to claim 14, wherein the
antioxidant comprises Ascorbyl Palmitate.

19. A drug eluting medical device comprising:
an implantable intraluminal structure;
a polymeric solution;
5 a pharmaceutically active agent, in therapeutic dosages,
incorporated into the polymeric solution, the resulting mixture being
affixed to at least a portion of the implantable intraluminal structure; and
a stabilizing agent incorporated into the resulting mixture to substantially
10 hinder degradation of the pharmaceutically active agent through
oxidation, the stabilizing agent being incorporated into the resulting
mixture such that it is proximate the pharmaceutically active agent.
20. The drug eluting medical device according to claim 19, wherein the
implantable intraluminal structure comprises a stent.
- 15 21. The drug eluting medical device according to claim 19, wherein the
pharmaceutically active agent comprises a rapamycin.
22. The drug eluting medical device according to claim 19, wherein the
20 pharmaceutically active agent comprises sirolimus.
23. The drug eluting medical device according to claim 19, wherein the
stabilizing agent comprises an antioxidant.
- 25 24. The drug eluting medical device according to claim 23, wherein the
antioxidant comprises Butylated Hydroxytoluene.
25. The drug eluting medical device according to claim 23, wherein the
antioxidant comprises Tocopherols.
- 30 26. The drug eluting medical device according to claim 23, wherein the
antioxidant comprises Ascorbic Acid.

27. The drug eluting medical device according to claim 23, wherein the antioxidant comprises Ascorbyl Palmitate.

28. The drug eluting device according to claim 19, wherein the
5 stabilizing agent has an affinity for the pharmaceutically active agent.

29. The drug eluting device according to claim 19, wherein the
stabilizing agent is mixed with the resulting, solution such that the stabilizing
agent is proximate the pharmaceutically active agent.

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30. A drug eluting medical device comprising:
a stent;
a biocompatible polymeric solution;
rapamycin, in therapeutic dosages, incorporated into the
15 polymeric solution, the resulting mixture being affixed to at least a
portion of the stent; and
an antioxidant incorporated into the resulting mixture to prevent
degradation of the rapamycin.

20 31. The drug eluting medical device according to claim 30, wherein
the antioxidant comprises Butylated Hydroxytoluene in the range from about
0.006 to about 0.02 percent weight by volume.

25 32. The drug eluting medical device according to claim 30, wherein the
antioxidant comprises Tocopherol in the range from about 0.048 to about 0.102
percent weight by volume.

30 33. The drug eluting medical device according to claim 30, wherein the
antioxidant comprises Ascorbic Acid in the range from about 0.022 to about
0.508 percent weight by volume.

34. The drug eluting medical device according to claim 30, wherein the antioxidant comprises Ascorbyl Palmitate in the range from about 0.01 to about 0.02 percent weight by volume.

5 35. The drug eluting medical device according to claim 30, wherein the antioxidant comprises 250 ppm Butylated Hydroxytoluene.